

Geography

Rivers

Learning objectives

- The students learn the names of important rivers and how rivers look and change because of their flow. They also learn how rivers affect the land around them.
- In the project stage, the students use this information to describe a river in their own country.

Useful vocabulary

erosion flood plain meander sediment valley

Preparation

If the students are going to do the project in class, they will either need access to the internet or local maps and atlases. *National Geographic* has local language websites and video channels where the students can find information.

Warmer

Ask the students to write down four things in each of the following categories:

Ball games, Unhealthy food, Interesting jobs, American states, Rivers

See which student finishes first and compare answers.

- 1 Elicit what the students know about rivers, bringing out the following information. A river begins at a source, for example a spring, and ends at a mouth, for example the sea. Rivers flow downhill but they do not always take a direct path. The flow of a river is a source of energy which changes its shape and features.

Tell the students to read the names of the rivers in the box and ask if they know which country or region the rivers are in, and if they know anything else about them. Which river is the longest?

Then see if they can match the pictures to the rivers.

Answers

a Yangtse b Amazon c Nile d Volga

Some information about the rivers is given in brackets.

- a Yangtse This river is in China. [It is about 6,300 km long, the third longest in the world. A third of China's population live on the land around the river (the Yangtse River Basin).]
- b Amazon This river is in South America. [It begins in Peru and flows east into the Atlantic Ocean. Most of it is in Brazil. It is the largest river in the world (quantity of water) and the second longest. It is about 6,400 km long. It is between 1.6 and 10 km wide but in the wet season parts of it can be as much as 190 km wide. There are no bridges across the Amazon because most of it is in the rainforest, where there are no roads or cities.]
- c Nile This river is in Africa. [It is about 6,650 km long and is believed to be the longest river in the world. It begins from Lake Victoria in Uganda and ends in Egypt. The Egyptians built the Pyramids close to the Nile because they had to bring the huge stones down the river from Aswan. About half of Egypt's population live in the Nile Delta region.]
- d Volga This river is in Russia. [It is about 3,700 km long, the longest river in Europe. It begins in hills between St Petersburg and Moscow and flows into the Caspian Sea. About half of Russia's biggest cities are on or near the Volga. In some places it is so wide you cannot see the other side. Sturgeon fish (from which we get caviar) live in the Volga.]

- 2 Ask the students to name two rivers in their country. Elicit some information about them, for example, *Where is it? Is it a long river? Is it famous for anything? Have you seen it?*

- 3 Point out the 'top', 'bottom' and 'side' of something on your desk. Ask the students to look at the diagram in the top right corner of the Rivers text and complete the sentences.

Answers

1 bed 2 bank

Extension activity

Tell the students that 'bank' has two meanings: the side of a river and a place you get money. Ask if they know any other words like this, for example, 'book' (*noun* thing you read / *verb* order ticket), 'train' (*noun* transport / *verb* prepare for sport) and 'park' (*noun* green place / *verb* to stop and leave a car somewhere for a period of time).

- 4 Tell the students to read the *Rivers* text and underline the words 1–6 in the text and then match them with their meaning a–f.

Answers

2 d 3 b 4 a 5 c 6 e

- 5 Ask the students to read the sentences. Give, or with a stronger group elicit, examples of words to complete the sentences (adverbs to go with *moves*, for example *quicker*, *stronger*). The students then read the text and complete the sentences with words from the text.

Answers

1 faster 2 more slowly

- 6 Ask the students how many paragraphs there are in the text (three). Tell them to match each paragraph to a row of diagrams.

Check understanding of these processes in L1 if necessary:

Ask why in **c** the river gets deeper (paragraph 1: sediment from erosion is carried down the river and out to sea).

Ask why in **a** there are curves (paragraph 2: the energy of the water erodes the river banks).

Ask why in **b** the river floods (paragraph 3: there is a lot of rain and the land is flat).

Ask the students to give examples of each of the three situations in their country, for example a river which often floods.

Answers

1 c 2 a 3 b

- 7 Tell the students to look at the photographs and say which river and country this is (the River Thames, England). Ask them to look at the text and say how long the Thames is (346 km). The students read the text and answer the questions.

Fast finishers

The students use mobile devices or a book to find the name of the longest river in the UK (the Severn) and some facts about it, for example which region and cities it goes through.

Answers

1 It goes east. 2 the North Sea 3 slowly 4 London
5 It is on flat land. 6 Because of the Thames Barrier.

Extension activity

Ask the students *Why are rivers important to people/countries?* (Uses of rivers include fishing, transport, energy and leisure.) *How do they affect people's lives?* (In the Amazon Rainforest, for example, it is the main form of transport; the flood plains of the major rivers such as the Nile, Yangtze, Ganges water the land, enabling crops to be grown which feed large parts of the population, etc.) *What can we do to protect rivers and keep them clean?*

Subject learning

In the next stage, the students are going to draw and write about a river in their country. Encourage a class discussion on what they have learned so far. If appropriate, do this in the students' own language. Use these questions:

Why do rivers change?

What happens when rivers flow fast?

Why are rivers important?

Also check some of the vocabulary learned in the lesson, for example draw a river with a curve on the board and ask what they can see (curve/meander).

Project

- Tell the students that they have to make a poster with text and pictures about a river in their country.
- Put them into pairs or groups of three. The stronger students should do/check the writing.
- Remind the students of their answers to Exercise 3. Get them to name more rivers in their country, small local ones as well as large national ones, and choose one. Make sure the groups choose different rivers so that there will be some variety in the posters.
- The students should use the *Thames* text as a model in terms of content and length. They will find out information at home and do the writing and drawing in class.
- Put the posters on the classroom wall and let the students go round the room comparing the information.

Cooler

Get the students to solve this famous logic problem:

A farmer wants to cross a river and take with him a wolf, a goat, and a cabbage. There is a boat that can take him and either the wolf, the goat, or the cabbage. If the wolf and the goat are alone on one bank, the wolf will eat the goat. If the goat and the cabbage are alone on the bank, the goat will eat the cabbage.

How can the farmer bring the wolf, the goat, and the cabbage across the river?

Answers

- 1 The farmer takes the goat across (leaving the wolf and cabbage behind); he returns alone.
- 2 The farmer takes the wolf across; he returns with the goat.
- 3 The farmer takes the cabbage across; he returns alone.
- 4 The farmer takes the goat across – everyone is together on the other bank.